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# Nebraska Catfish Anglers: Descriptions And Insights Derived From The 2002 Nebraska Licensed Angler Survey

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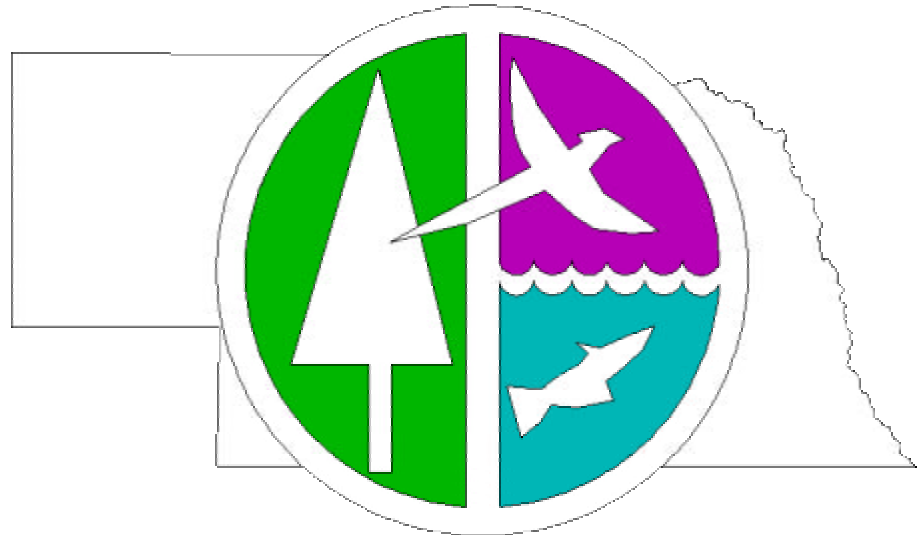
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**Nebraska Catfish Anglers:  
Descriptions And Insights Derived From The  
2002 Nebraska Licensed Angler Survey**



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**April 2005**

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## Survey Procedures

On October 22, 2002, 5000 six-page surveys (Appendix 1) were sent to a stratified-random sample of Nebraska anglers drawn from the 2001 Licensed Anglers database. The database included all anglers who purchased a license in 2001 as well as all lifetime fishing permit holders who purchased their license before or during 2001. The database did not include those possessing a free permit, such as veteran's or senior citizen permits. The survey subsample (2.6% of the 2001-licensed angler database) was stratified such that the proportions of surveys in the subsample (4366 residents and 634 non-residents) matched the proportions of resident/non-resident license holders.

Two weeks after the original mailing, a postcard reminder was sent to all 5000 survey recipients encouraging those who hadn't completed the survey to do so and thanking those that had. While postage procedures did not allow for non-deliverable surveys to be returned, 691 of the reminder postcards were returned as undeliverable indicating a valid mailing of 4309 surveys (2.2% of the 2001 licensed angler database).

Surveys were completely anonymous and contained no linking identification. Respondents were asked their zip code which was used during analysis to identify Fisheries Division District of residence. Surveys were received through May of 2003 with 1386 surveys returned. This represented a 32.2% response rate. Response rates varied by district from 36.8% in District 2 to 19.5% in District 5. Generally, the more urbanized the district, the lower the response rate observed.

Analyses in this report will refer to number of different groups. **Catfish seeking** anglers are defined as any angler who has spend at least 1 trip during 2002 in pursuit of a catfish species (channel, blue, flathead, or bullhead). This is the most general group included in the analyses and is also the least avid group of anglers in regards to their relationship to catfish angling. **Catfish anglers** are defined as those respondents who identified a catfish species as the species they most prefer to target. Catfish anglers represent a smaller group of respondents with a higher avidity for catfish angling than catfish seeking anglers. The third group identified and examined in this report are Nebraska Catfish Angler Association members, referred to as **NCAA anglers**. These anglers are the smallest segment of anglers sampled and represent the most avid catfish anglers in the state. Surveys results were obtained from NCAA anglers during their February 2003 business meeting and used the same survey instrument that was distributed during the 2002 NLAS. NCAA angler responses are not included in Catfish Seeking or Catfish Anglers group analyses which were drawn from the 2002 NLAS.

Some analyses are also broken down into species-specific groups of anglers. All anglers that sought catfish at least once during 2002 where asked what species they preferred to fish for in Nebraska. Using this information, the **Catfish seeking anglers** were further subdivided into channel, blue, flathead, bullhead, or generalized (no preference) catfish anglers.

#### Number of Catfish Anglers And Angler Trips

Catfish are an important component to the sport fisheries of Nebraska. From the 2002 Nebraska Licensed Angler Survey (NLAS), channel catfish ranked number

3 with 15.4% of licensed Nebraska anglers indicating that channel catfish were their preferred target species. Even if catfish are not an angler's favorite target, they often still occupy a portion of their time on water as the NLAS also indicated that channel catfish were the 4<sup>th</sup> most SOUGHT species in Nebraska. During 2002 43.1% of Nebraska anglers fished for channel catfish during the year. Participation was highest in Districts III and V, which also had the largest proportions of catfish anglers. Almost 1 in 3 of licensed Non-Resident anglers spent at least one trip in the pursuit of catfish during 2002.

**Table 1. Number of responses from catfish seeking anglers and catfish anglers by residence.**

	Respondents Who Sought Catfish At Least Once During 2002		Respondents Who Prefer Fishing For Catfish	
Overall	1137	43.1%	142	15.4%
District I	85	24.7%	4	6.3%
District II	42	38.1%	2	6.3%
District III	169	49.1%	22	16.8%
District IV	89	24.7%	2	2.8%
District V	407	53.1%	73	21.9%
District VI	217	41.5%	23	12.3%
Non-Resident	110	30.9%	14	15.6%
NA	18	44.4%	2	13.6%

Of the 191,033 anglers in Nebraska during 2002, over 82,000 spent at least one trip targeting catfish. Nebraska has almost 30,000 anglers who prefer to fish for catfish over any other species. District V alone has over half of those catfish-targeting anglers. Districts III, V, and VI would appear to be areas where additional attention to catfish management may be warranted due to their high participation rates (>40% of anglers), which is likely tied to the fact that most catfish angling opportunities in Nebraska lie in these districts.

**Table 2. Total number of catfish seeking anglers and catfish anglers in Nebraska.**

	Total Number Of 2002 Anglers	Total Number Of Anglers Who Sought Catfish At Least Once During 2002	Total Number Of Anglers Who Prefer Fishing For Catfish
Overall	191,033	82,327	29,390
District I	11,934	2,948	758
District II	4,872	1,856	305
District III	22,920	11,257	3,849
District IV	13,436	3,321	373
District V	76,826	40,773	16,842
District VI	30,500	12,650	3,751
Non-Resident	24,077	7,442	3,745
NA	6,468	2,875	862

Anglers seeking catfish at least once during 2002 averaged a mean estimate of 17 trips targeting catfish. However, the distribution of angler trips for catfish was highly skewed (skewness = 2.515), indicating the median value may be a more appropriate measure. The median angler trips for anglers seeking catfish was 7 angler trips which results in 576,289 angler trips targeting catfish from January through October, 2002. With an estimated 2,857,464 total angler trips taken in Nebraska during that same period (2002 NLAS), 1 in 5 of those angler trips (20.1%) were spent targeting catfish. As catfish fishing avidity increased, number of angler trips increased (Figures 1 and 2). Number of trips was similar between channel and generalized catfish anglers while flathead anglers had a more erratic distribution and higher number of trips per angler (Figure 3).

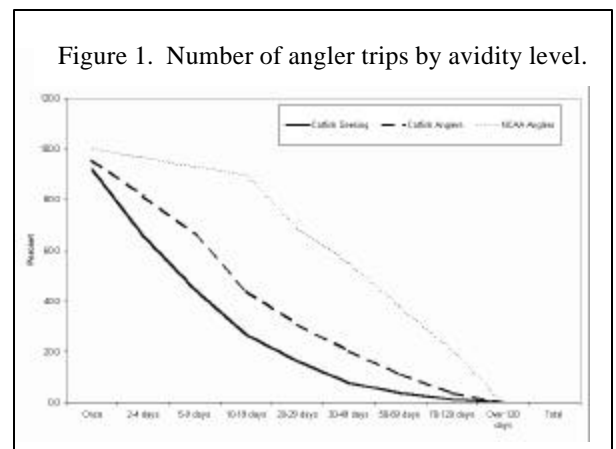


Figure 2. Number of angler trips by avidity level.

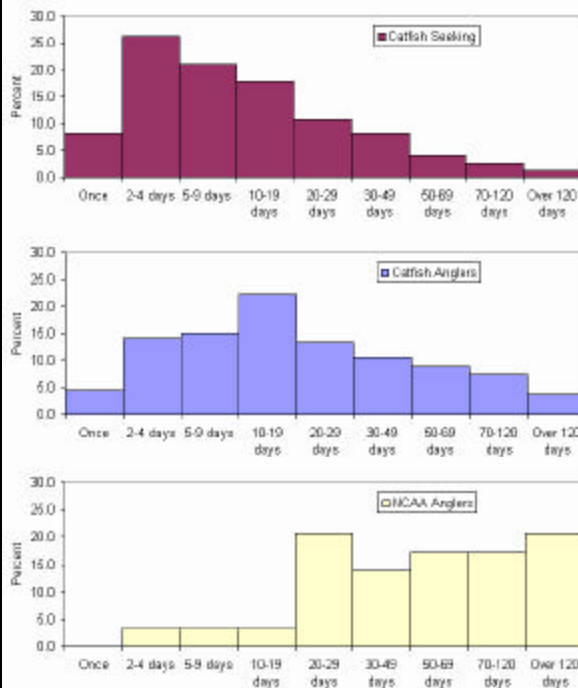
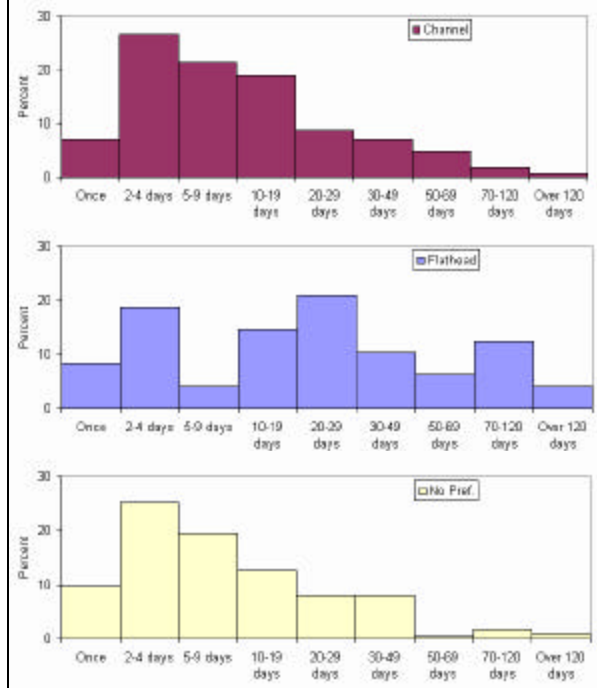


Figure 3. Number of angler trips by angler type.



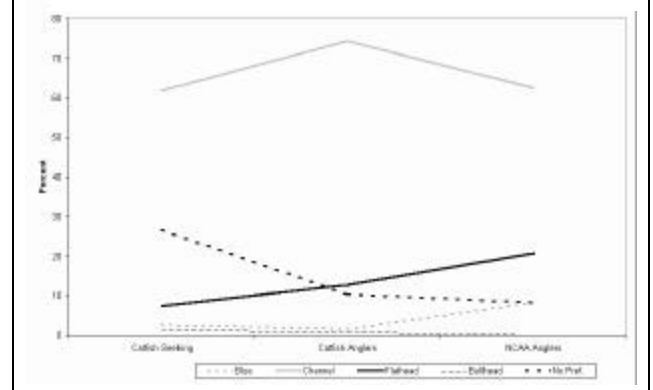
### Preferred Catfish Species

Species preference distribution among all avidity levels of catfish anglers was similar (Figure 4). Channel catfish were the preferred target of at least 3 of 5 anglers at every avidity levels. Flathead catfish gained popularity among the most avid anglers while a generalized catfishing preference was highest among the lowest avidity anglers.

Table 3. Species preference distribution among three avidity levels of anglers.

	Catfish Seeking	Catfish Anglers	NCAA Anglers
Blue	2.6%	1.6%	8.3%
Channel	61.8%	74.4%	62.5%
Flathead	7.5%	12.8%	20.8%
Bullhead	1.4%	0.8%	0.0%
No Pref.	26.8%	10.4%	8.3%

Figure 4. Species preference by avidity level.



## Distances Traveled

Maximum distance traveled did not vary among catfish seeking anglers and catfish anglers. However, the highly avid NCAA catfish anglers were willing to travel farther for catfishing opportunities (Figures 5 and 6). For all avidity levels, major declines were seen at the 40/60 and 60/100 mile breaks. This would indicate that most catfish anglers are willing to travel to approximately 60 miles for quality opportunities and any special (i.e. trophy) catfish management strategies to provide unique opportunities should occur within 60 miles of major population centers, when possible, to maximize participation.

Figure 5. Maximum distance traveled by avidity level.

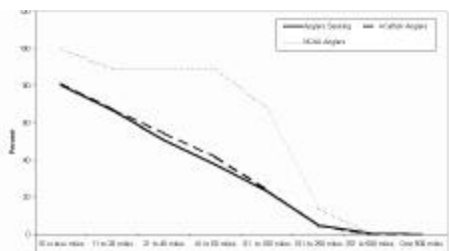


Table 4. Maximum distance traveled (cummulative percent of anglers) to fish for catfish during 2002.

	Catfish Seeking	Catfish Anglers	NCAA Anglers
10 Miles	86.4	85.8	89.3
20 miles	70.5	73.1	89.3
40 miles	57.3	60.4	89.3
60 miles	42.7	42.5	67.9
100 miles	24.5	23.1	14.3
250 miles	20.2	18.7	0.0

Figure 6. Maximum distances traveled to fish for catfish by avidity level.

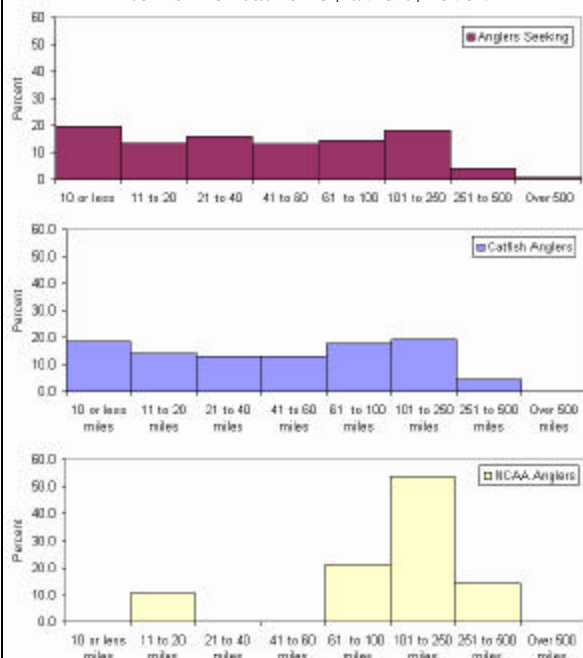
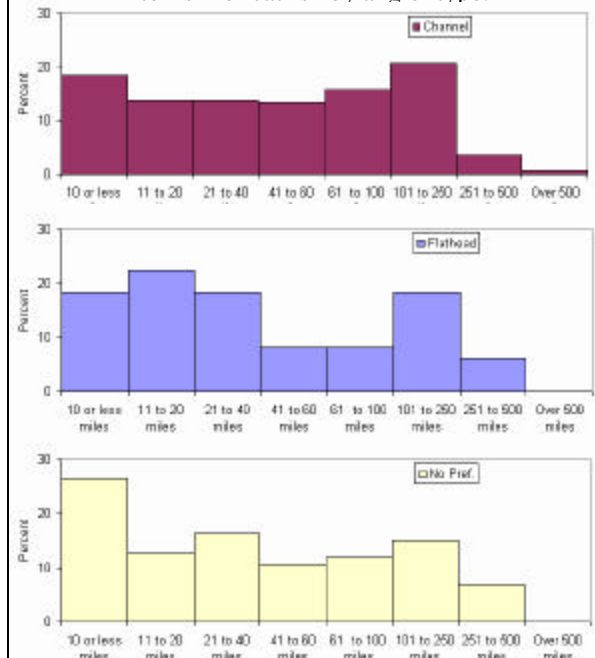


Figure 7. Maximum distances traveled to fish for catfish by angler type.

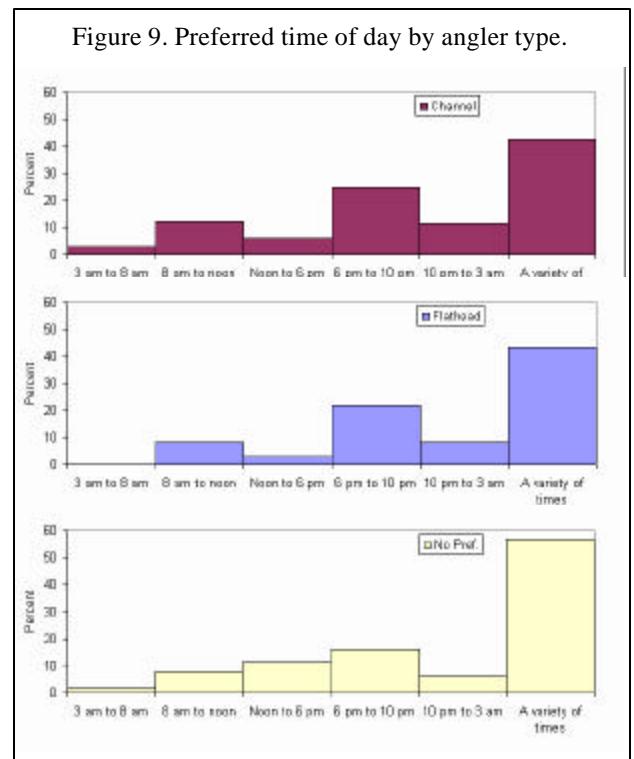
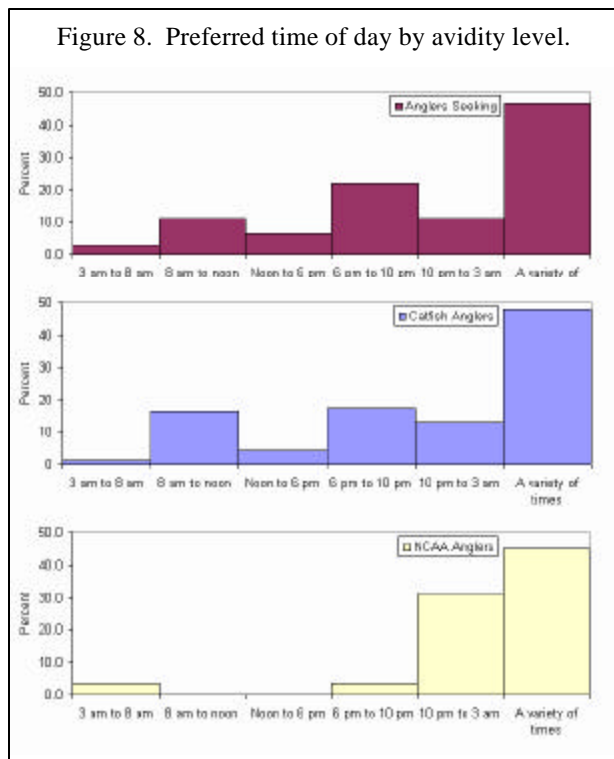




No differences in maximum distances traveled were seen between preferred catfish species (Figures 7). Avidity level of anglers appears to have a greater impact on willingness to travel than does species of interest.

### Time Of Day

No differences were seen among preferred time-of-day for anglers seeking catfish or catfish anglers. NCAA anglers, however, displayed greater tendencies to fish at night (10 pm to 3 am) than did less avid anglers (Figure 8). Species preference had little impact on preferred time-of-day for catfish angling (Figure 9).



### Set/Limb Lines

With the exception of District V, all catfish anglers used rod and reels during 2002, presumably for catfish. This would indicate that use of set/limb lines is likely an additional technique that compliments the use of rod and reels, not replaces

them. Although the NLAS data does not indicate target species for the use of set/limbs, it is likely that their use in Nebraska is primarily for the capture of the catfish species. Over 1 in 7 anglers who sought catfish at least once during 2002 used a set/limb line. This translates to almost 13,000 anglers in Nebraska involved with the use of set/limbs, primarily in District V.

**Table 5. Percent and total number of catfish seeking anglers who utilized rod & reel and set/limb lines during 2002.**

	Rod & reel		Set lines/limb lines	
Overall	99.6%	81,991	15.7%	12,937
District I	100.0%	2,948	0.0%	0
District II	100.0%	1,856	12.5%	232
District III	100.0%	11,257	14.5%	1,627
District IV	100.0%	3,321	4.5%	151
District V	99.1%	40,395	21.8%	8,872
District VI	100.0%	12,650	13.3%	1,687
Non-Resident	100.0%	7,442	8.8%	657
NA	100.0%	2,875	0.0%	0

### Use Of Rivers And Streams

The following two tables represent MAXIMUM percent/number of all anglers who sought catfish at least once during 2002 who utilized the given waterbodies at least once. Actual use of these rivers and streams with the intent of catching catfish may be lower than these values, however, as anglers may have fished for catfish in other waterbodies (ex. Sandpits) and fished in rivers only for none-catfish species (ex. Paddlefish). Over half of the anglers who fished for catfish during 2002 fished in a river or stream at least once. One in 3 resident anglers fished rivers and streams OTHER than the Platte and Missouri Rivers. Loetic systems, although they are only minimally-managed for catfish fisheries, are utilized by a significant portion of Nebraska Anglers.

**Table 6. Percent of catfish seeking respondents who fished in the following waterbody types:**

	Platte River	Missouri River	Other Rivers and Streams	All Rivers and Streams
Overall	15.9%	23.0%	35.4%	56.3%
District I	9.5%	9.5%	33.3%	47.6%
District II	0.0%	25.0%	43.8%	50.0%
District III	20.5%	37.3%	37.3%	72.3%
District IV	4.8%	0.0%	28.6%	33.3%
District V	18.2%	28.5%	39.7%	64.0%
District VI	17.4%	9.3%	33.7%	44.2%
Non-Resident	2.9%	14.7%	14.7%	29.4%
NA	25.0%	0.0%	12.5%	25.0%

**Table 7. Total number of catfish seeking respondents who fished in the following waterbody types:**

	Platte River	Missouri River	Other Rivers and Streams	All Rivers and Streams
Overall	13,125	18,920	29,147	46,362
District I	281	281	983	1,404
District II	0	464	812	928
District III	2,306	4,204	4,204	8,137
District IV	158	0	949	1,107
District V	7,431	11,622	16,195	26,102
District VI	2,206	1,177	4,266	5,589
Non-Resident	219	1,094	1,094	2,189
NA	719	0	359	719

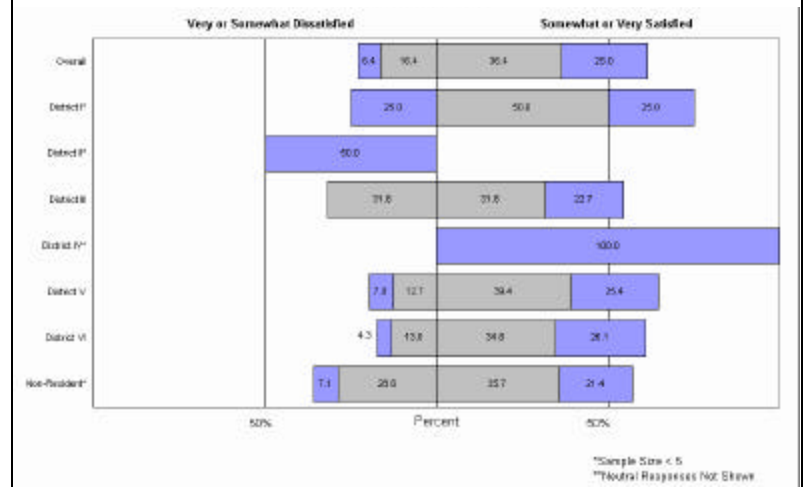
### Angler Satisfaction

During the 2002 NLAS, anglers were asked about their satisfaction with their fishing (for all species) during 2002. Sixty-one percent of anglers who identified themselves as catfish anglers stated that they were somewhat or very satisfied with their fishing in Nebraska. Only 22.8 percent of catfish anglers were dissatisfied with their fishing experiences during 2002 (Figure 10).

**Table 8. Satisfaction of catfish seeking anglers during 2002 (includes all angling, not specifically catfish).**

Anglers	Mean	Sample Size
Overall	3.57	140
District I	3.5	4
District II	2	2
District III	3.4	22
District IV	5	2
District V	3.63	71
District VI	3.65	23
Non-Resident	3.36	14

**Figure 10. Satisfaction of catfish anglers with their 2002 angling experiences**

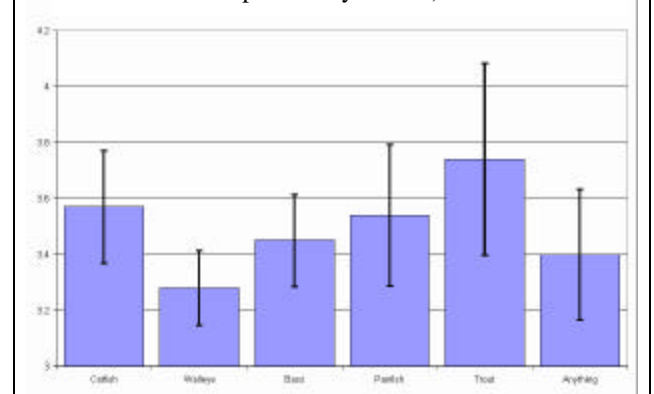


With the exception of Districts 2 and 4, which had unreasonably low sample sizes, about 1 in 4 catfish anglers were very satisfied with their fishing. When averaged on a five-value Likert scale, mean satisfaction of catfish anglers second only to trout anglers and was higher than walleye, bass, panfish, or generalized anglers (Figure 11).

**Table 9. Satisfaction of anglers during 2002 by angler type (includes all angling, not specifically catfish).**

	Mean	Standard Deviation	Sample Size
Catfish	3.57	1.21	140
Walleye	3.28	1.13	276
Bass	3.45	1.14	182
Panfish	3.54	1.18	84
Trout	3.74	1.02	34
Anything	3.4	1.12	89

**Figure 11. Satisfaction of anglers during 2002 by angler (includes all angling, not specifically catfish).**



During the 2002 NLAS survey an addition subscale of 4 questions were asked to further examine anglers satisfaction with strictly their catfish fishing in Nebraska. Agreement between subscale items was consistent and catfish seeking anglers averaged a score of 3.28 on a 5-point scale ranging from Strongly Disagree to Strongly Agree. Differences between districts were minimal with the exception of District IV, whose catfish seeking anglers demonstrated a higher satisfaction level than other districts.

**Table 10. Satisfaction subscale values for catfish seeking anglers.**

Scale To Measure Satisfaction Of Catfish Seeking Anglers	I am happy with my success fishing for catfish in Nebraska	I would recommend fishing for catfish in Nebraska to others	I am satisfied with the size of catfish I catch in Nebraska	It is becoming easier to catch a catfish in Nebraska*	Average of satisfaction subscales	Sample Size
Overall	3.19	3.44	3.35	3.10	3.28	625
District I	3.21	3.40	3.53	2.86	3.22	28
District II	3.30	3.26	3.29	3.43	3.34	19
District III	3.23	3.39	3.26	3.07	3.26	106
District IV	3.76	3.81	3.79	3.63	3.74	31
District V	3.03	3.36	3.30	3.01	3.18	273
District VI	3.25	3.49	3.35	3.26	3.36	113
Non-Resident	3.68	3.46	3.37	3.16	3.43	49

\*Subscale was worded inversely on the survey and recoded/reworded for analysis.

Some differences were seen among avidity levels of catfish anglers. No difference was seen in the mean satisfaction subscale values between catfish seeking anglers and catfish anglers; however, NCAA anglers had a higher mean satisfaction subscale value. The most avid catfish anglers of Nebraska are also those most pleased with catfishing in the state, however they are the most displeased with catfish sizes.

Table 11. Satisfaction subscale values by avidity level.

Scale To Measure Catfish Anglers Satisfaction	I am happy with my success fishing for catfish in Nebraska.	I would recommend fishing for catfish in Nebraska to others.	I am satisfied with the size of catfish I catch in Nebraska.	It is becoming easier to catch a catfish in Nebraska.*	Average of satisfaction subscales	Sample Size
Catfish Seeking	3.19	3.44	3.35	3.10	3.28	625
Catfish Anglers	3.12	3.57	3.31	2.98	3.25	130
NCAA Anglers	3.07	3.71	3.00	3.48	3.33	28

\*Subscale was worded inversely on the survey and recoded/reworded for analysis.

### Angler Motivations

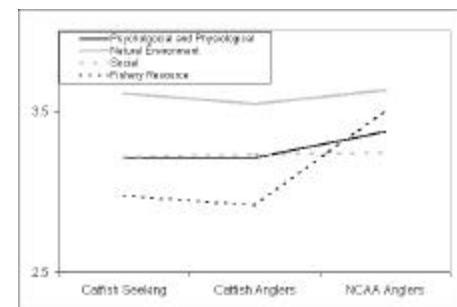
An instrument developed by Ditton (XXX) was used to examine motivations among catfish anglers. The instrument consisted of 17 questions on a five-point Likert scale subdivided into 4 subscales measuring the importance of four different motivational factors: Psychological and Physical, Natural Environment, Social, and Fishery Resource motivations. Psychological and physical motivations include physical exercise, new experiences, getting away from daily routines, and relaxation. Natural environment motivations include being close to water, being outdoors, and experience natural settings. Social motivations for catfishing include family recreation, being with friends, and getting away from people. Fishery resource motivations include experience the catching of fish, catching trophy fish, obtaining fish for food, and the sport of fishing.

**Table 12. Motivation subscale item values by avidity level.**

Question	Subscale	Catfish Seeking Mean	Catfish Anglers Mean	NCAA Anglers Mean
For the challenge or sport	P & P	3.30	3.13	4.14
For relaxation	P & P	4.00	3.94	4.14
To experience adventure and excitement	P & P	3.02	2.98	3.67
For physical exercise	P & P	2.18	2.24	2.54
To experience new and different things	Natural Environment	2.69	2.61	3.00
To be outdoors	Natural Environment	4.10	3.99	3.97
To experience natural surroundings	Natural Environment	3.78	3.72	3.71
To be close to the water	Natural Environment	2.94	2.80	3.11
To be with friends	Social	3.30	3.35	3.50
To get away from other people	Social	3.23	3.19	3.07
To get away from the daily routine	Social	3.85	3.85	3.66
For family recreation	Social	3.57	3.48	3.46
To compete for prizes or money	Fishery Resource	1.19	1.12	3.14
To obtain fish for eating	Fishery Resource	2.68	2.80	2.11
To catch a trophy fish	Fishery Resource	2.29	2.00	3.59
For the fun of catching fish	Fishery Resource	4.09	4.09	4.10

Relative importance of the four different motivations among catfish seeking anglers and catfish anglers was similar. NCAA anglers were more motivated by fishery resource and psychological and physical motivations than the less avid groups (Figure 12). This is likely manifested in a greater desire to seek trophy fish, tournament prizes, and greater fishing challenges than less avid anglers. Among all anglers, the natural environment motivations ranked as the most important

**Figure 12. Fishery motivation subscale values by avidity level.**



factor motivating them to fish. The importance of clean, natural surroundings and outdoor experiences is the most important motivating factor among catfish anglers.

**Table 13. Motivational scale values by avidity level.**

		Psychological and Physiological	Natural Environment	Fishery Resource	Social
Catfish Seeking	Mean	3.21	3.61	2.98	3.22
	Std. Error	0.03	0.03	0.03	0.03
	N	656	653	655	650
Catfish Anglers	Mean	3.21	3.54	2.91	3.23
	Std. Error	0.07	0.07	0.07	0.07
	N	134	133	134	134
NCAA Anglers	Mean	3.37	3.63	3.50	3.24
	Std. Error	0.18	0.20	0.17	0.18
	N	29	29	29	29

Relative importance of the different motivations was similar for channel, blue, and generalized catfish anglers (Figure 13). Flathead anglers placed greater importance on social and fishery resource motivations which is reflective of previous data that was presented indicating that flathead anglers generally are more avid than other species-preferred angler types. Bullhead anglers are the only group that ranked social motivations as the most important motivating factor to fish. All other species-preferred angler groups maintained that natural resource motivations were the most important in their fishing experiences.

**Figure 13. Fishery motivation subscale values by angler type.**

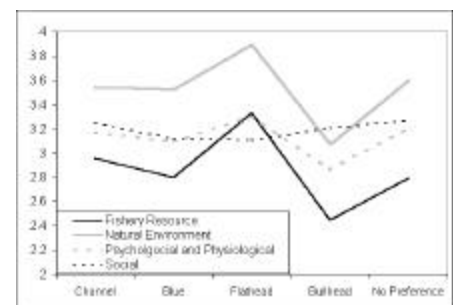


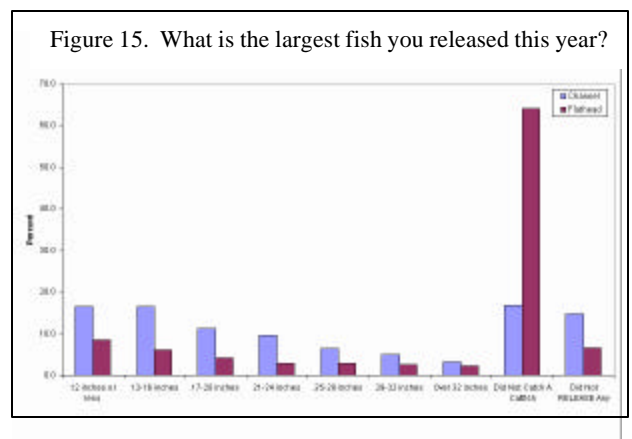
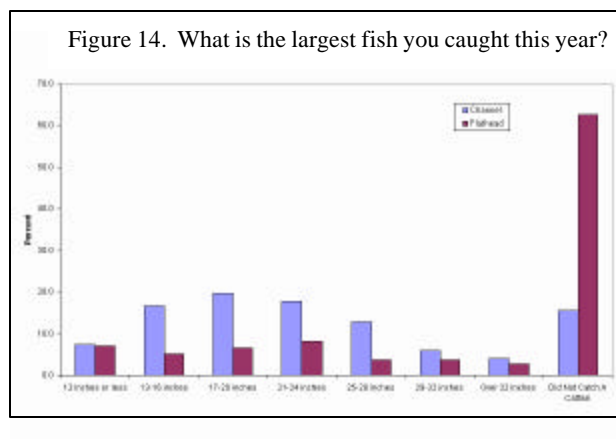


Table 14. Motivational scale values by angler type.

		Psychosocial and Physiological	Natural Environment	Fishery Resource	Social
Channel	Mean	3.17	3.54	2.95	3.25
	Std. Error	0.04	0.04	0.04	0.04
	N	400	398	398	393
Blue	Mean	3.09	3.52	2.79	3.12
	Std. Error	0.11	0.14	0.14	0.21
	N	16	16	17	17
Flathead	Mean	3.30	3.90	3.33	3.10
	Std. Error	0.13	0.10	0.14	0.11
	N	46	45	46	47
Bullhead	Mean	2.86	3.07	2.44	3.20
	Std. Error	0.34	0.29	0.33	0.34
	N	9	9	9	9
No Preference	Mean	3.21	3.60	2.79	3.27
	Std. Error	0.06	0.06	0.06	0.06
	N	175	174	173	173

### Maximum Sizes Of Catfish Caught/Released

During the 2002 NLAS, anglers were asked to provide (catagorically) the size of the largest channel and flathead catfish they caught and that they released. Primarily these questions were to function as a long term indicator about changes in catfishing quality changes in Nebraska by revisiting the same questions on future Nebraska angler surveys. Most commonly, anglers were able to catch up to 17-20 inch channel catfish 21-24 inch flathead catfish in Nebraska during 2002 (Figure 14). The most common responses in the largest fish released questions for both species were the smallest size groups (Figure 15).



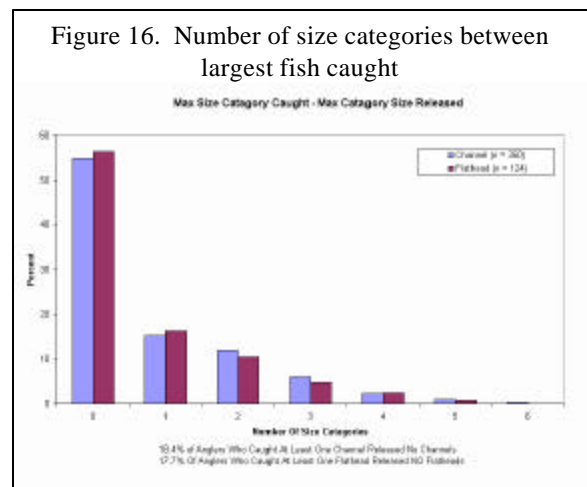
**Table 15. Largest and smallest channel and flathead catfish caught and largest channel and flathead released during 2002.**

		12 inches or less	13-16 inches	17-20 inches	21-24 inches	25-28 inches	29-32 inches	Over 32 inches	Did Not Catch A Catfish	Did Not RELEASE Any Catfish
Channel	Largest Caught	7.4%	16.7%	19.7%	17.9%	12.9%	5.9%	4.0%	15.5%	
	Largest Released	16.5%	16.5%	11.2%	9.7%	6.5%	4.9%	3.2%	16.9%	14.8%
Flathead	Largest Caught	7.0%	5.2%	6.6%	8.3%	3.8%	3.8%	2.7%	62.7%	
	Largest Released	8.5%	6.2%	4.2%	2.9%	2.9%	2.5%	2.2%	64.1%	6.5%

### Harvest Tendencies

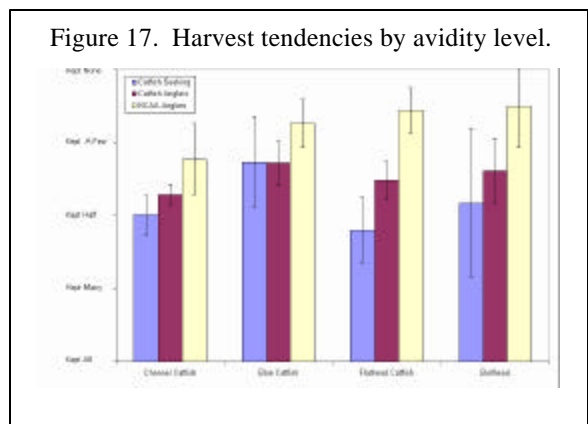
When the difference (in number of size categories) between maximum size caught and maximum size released is examined, there was no difference for over half of the anglers who caught channels or flathead catfish in 2002 (Figure 16).

While this does not indicate that these same people release all of their large fish, it does show a willingness to voluntarily release large catfish. For example, if an angler's largest 5 fish of 2002 were in the 25-28 inch size group, over half the time that angler



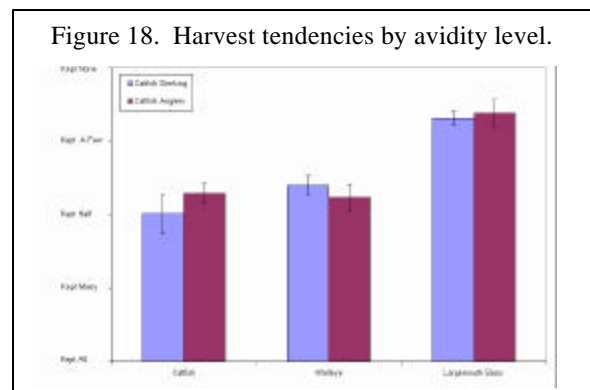
released at least 1 of those five fish. Although catfish anglers may often be more harvest-oriented than other anglers, there does appear to be a willingness to release some large fish. This willingness may translate into support, in some instances, for size restrictions to grow larger fish. However, 17.7% and 18.4% of anglers who caught a flathead and channel catfish, respectively, released NO catfish, indicating that approximately 18% of catfish anglers harvest all the fish that they catch.

Anglers were asked to rank their release tendencies on a 5-point Likert scale, ranging from keeping all fish they caught (value = 1) to keeping none of the fish they caught (value = 5) for each catfish species they targeted during the year. As avidity level increased among catfish angler groups, propensity for releasing of fish increased greatly and was statistically significant for channel and flathead catfish (Figure 17). At high avidity levels, flathead catfish and bullheads were most likely to be released while channel catfish were more likely to be harvested, although all species for all avidity levels averaged harvesting half or less off all fish caught. Only catfish seeking anglers catching flatheads were more likely to harvest rather than release their fish.



Harvest tendencies for catfish seeking anglers and for catfish anglers were similar to comparable groups of walleye anglers and significantly lower than bass anglers (Figure 18). However, size and bag regulations can influence this measure of harvest tendencies, as some circumstances would dictate the release of fish.

Walleye fisheries in Nebraska tend to be highly regulated while catfish fisheries are largely unregulated. This influence on the measures of harvest tendencies may have increased walleyes anglers harvest tendencies



above their personal preferences while the measures of catfish harvest tendencies should reflect their personal tendencies without bias. Therefore, it is likely that catfish anglers may have a higher tendency to release their fish than did walleye anglers during 2002.

**Table 16. Harvest/release tendency values for channel, blue, flathead, and bullhead catfish by avidity level.**

		Channel Catfish			Blue Catfish		
		Mean	N	Standard Deviation	Mean	N	Standard Deviation
<div> 1 Kept All  2 Kept Many  3 Kept Half  4 Kept A Few  5 Kept None </div>	Catfish Seeking	3.01	407	1.35	3.73	109	1.49
	Catfish Anglers	3.29	102	1.39	3.72	23	1.48
	NCAA Anglers	3.77	22	1.15	4.26	19	0.73

		Flathead Catfish			Bullhead		
		Mean	N	Standard Deviation	Mean	N	Standard Deviation
	Catfish Seeking	2.8	137	1.45	3.17	55	1.8
	Catfish Anglers	3.48	42	1.56	3.61	15	1.59
	NCAA Anglers	4.44	17	0.63	4.5	4	0.58

#### *Catfish Attitudes (Importance Of Catch, Harvest, Size, and Number)*

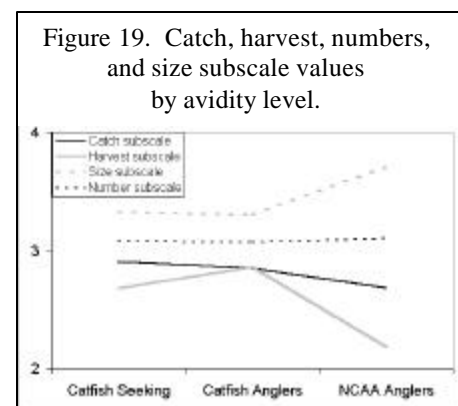
An instrument developed by Ditton (XXX) was used to examine angler attitudes among catfish anglers, particularly about important components to a successful outing. The instrument consisted of 16 questions on a five-point Likert scale subdivided into 4 subscales measuring the importance of four different aspects to angler attitudes: Catch, Harvest, Size, and Number. The catch attitude measured the importance of the need to catch something to the success of an outing. Harvest attitudes reflected the need to harvest fish as it related to enjoyable angling. The size subscale examined the importance of the size of individual fish

caught to anglers' satisfaction. The number subscale measured the importance of numbers of fish caught during an outing. The individual items are for each subscale are listed below.

**Table 17. Angler attitudeTable 4 subscale item values by avidity level.**

Answer	Subscale	Catfish Seeking Mean	Catfish Anglers Mean	NCAA Anglers Mean
A fishing trip can be successful even if no fish are caught	Catch	3.63	3.74	3.73
If I thought I wouldn't catch any fish, I would not go fishing	Catch	2.75	2.73	2.67
When I go fishing, I'm just as happy if I don't catch a fish	Catch	2.72	2.83	3.10
When I go fishing, I am not satisfied unless I catch at least something	Catch	3.24	3.19	2.90
I want to keep all the fish I catch	Harvest	2.02	2.14	1.97
I'm just as happy if I release all the fish I catch	Harvest	3.32	3.17	3.73
I usually eat the fish I catch	Harvest	3.42	3.70	2.37
I'm just as happy if I don't keep the fish I catch	Harvest	3.40	3.29	3.79
The bigger the fish I catch, the better the fishing trip	Size	3.28	3.38	3.70
I am the happiest with a fishing trip if I catch a challenging game fish	Size	3.53	3.42	3.60
I would rather catch one or two big fish than ten smaller fish	Size	3.17	3.20	3.57
I like to fish where I know I have a chance to catch a trophy fish	Size	3.29	3.12	3.97
I'm happiest with a fishing trip if I catch at least the limit	Numbers	2.98	2.92	2.97
The more fish I catch, the happier I am	Numbers	3.30	3.31	3.03
A successful fishing trip is one in which many fish are caught	Numbers	3.22	3.13	3.27
A full stringer is the best indicator of a good fishing trip.	Numbers	2.78	2.80	3.17

Very little difference was seen in attitudes among the lower two avidity levels, with both ranking and mean values similar for both catfish seeking anglers and catfish anglers (Figure 19). While NCAA anglers also ranked the different components the same as the other two groups (Highest to Lowest: Size, Numbers, Catch, Harvest), there was much more separation between mean subscale values.

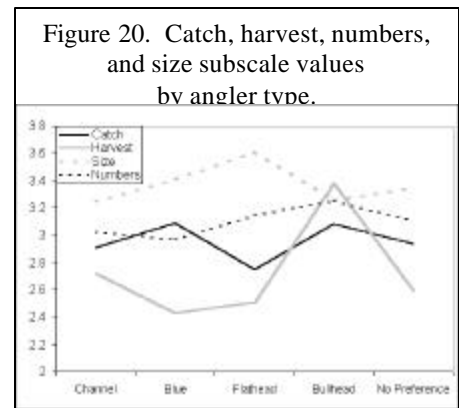


Size of fish caught was much more important to the most avid anglers than the other groups while the need to harvest fish was much lower (Figure 19).

**Table 18. Angler attitude scale values by avidity level.**

		Catch	Harvest	Size	Numbers
Catfish Seeking	Mean	2.85	2.86	3.07	3.31
	Std. Error	133	133	133	133
	N	0.07	0.07	0.07	0.07
Catfish Anglers	Mean	2.91	2.68	3.07	3.32
	Std. Error	660	658	658	659
	N	0.03	0.03	0.03	0.03
NCAA Anglers	Mean	2.68	2.18	3.10	3.71
	Std. Error	30	30	30	30
	N	0.14	0.15	0.17	0.13

Ranking of the different subscales was the same when respondents were separated by species of choice, with two exceptions. Bullhead anglers ranked harvest as the most important, rather than the least important, component to successful fishing trips (Figure 20). Blue catfish anglers indicated that catching something was more important to them than the numbers of fish caught, as was the case for the other species. This is likely due to the low number of blue catfish angling opportunities in Nebraska, and the low densities of blue catfish in the populations that do exist.



The fact that harvest ranks last as a successful component of fishing trips does not indicate that anglers don't desire to harvest fish. It does mean that there is a willingness to consider a trip successful even if no fish are present in the creel. This information reinforces the harvest tendencies presented earlier and may support the use of catch-and-release restrictions in some circumstances.

**Table 19. Angler attitude scale values by angler type.**

		Catch	Harvest	Size	Numbers
Channel	Mean	2.91	2.72	3.02	3.25
	Std. Error	403	402	401	403
	N	0.04	0.04	0.04	0.04
Blue	Mean	3.09	2.43	2.97	3.41
	Std. Error	17	17	17	17
	N	0.22	0.16	0.16	0.18
Flathead	Mean	2.75	2.51	3.15	3.61
	Std. Error	48	47	48	47
	N	0.13	0.13	0.12	0.12
Bullhead	Mean	3.08	3.38	3.25	3.26
	Std. Error	9	9	9	9
	N	0.39	0.32	0.38	0.23
No Preference	Mean	2.94	2.60	3.10	3.34
	Std. Error	175	175	175	175
	N	0.06	0.06	0.06	0.06

### Support For Regulation Changes

Currently there are few restrictions placed on catfish harvest in Nebraska. The catfish regulations that are present are a mix of bag restrictions (5 fish, 3 fish, and catch and release). As catfish management progresses in Nebraska, regulations restricting catfish harvest will likely become more common. This is particularly true in Districts 3 and 5 where the majority of catfish anglers reside and waterbodies are small in size, resulting in high angling pressure on catfish populations.

The 2002 NLAS used a subscale of four questions to gauge the support of anglers for the use of catfish regulations. Values ranged from 1 (Strongly Agree) to 5 (Strongly Disagree). A value of 3 represents a neutral response. Mean angler support for regulations was 3.4. Support for regulations was similar across districts while support for regulations increased along with avidity level of anglers. NCAA anglers exhibiting the strongest support for regulations across the board, which

corresponds to results already presented that indicate that NCAA anglers place more importance on the size of fish than other avidity groups.

Responses were higher when asked in a generic manner (i.e. “I support regulations on catfish to increase their size”) than when asked with specific regulations stated (i.e. “I support catfish length limits”). Responses were strong when asked in a manner that presented a positive change in the fish population but were less strong when phrased in a manner that highlighted the impacts upon individual anglers. Future research and public relation efforts should keep this in mind and present regulation changes more in light of expected changes to the fish caught by individual anglers than by expected changes in what individual anglers are allowed to harvest. Greater public support will be obtained by focusing on the changes to the fish in the lake and the anglers on the bank.

**Table 20. Regulation support subscale item values by district.**

	I support regulations on catfish to increase their numbers.	I support regulations on catfish to increase their size.	I support catfish bag limits.*	I support catfish length limits.*	Average of 4 regulation subscales	Sample Size
Overall	3.56	3.44	3.40	3.19	3.40	641
District I	3.43	3.17	3.77	2.93	3.33	30
District II	3.25	3.20	2.90	2.85	3.05	20
District III	3.56	3.46	3.32	3.24	3.40	106
District IV	3.22	3.18	3.52	3.15	3.27	32
District V	3.62	3.51	3.34	3.22	3.42	281
District VI	3.57	3.42	3.55	3.25	3.46	118
Non-Resident	3.68	3.46	3.37	3.16	3.43	49

\*Subscale was worded inversely on the survey and recoded/reworded for analysis.



**Table 20. Regulation support subscale item values by avidity level.**

	I support regulations on catfish to increase their numbers.	I support regulations on catfish to increase their size.	I support catfish bag limits.*	I support catfish length limits.*	Average of 4 regulation subscales	Sample Size
Catfish Seeking	3.56	3.44	3.40	3.19	3.40	641
Catfish Anglers	3.62	3.60	3.46	3.12	3.46	132
NCAA Anglers	4.00	3.69	3.37	3.25	3.59	28

\*Subscale was worded inversely on the survey and recoded/reworded for analysis.

Angler support for regulations (as measured by the mean subscale values presented above) was correlated to angler satisfaction (as measured by the mean catfish angler subscale values presented earlier)(GLM:  $r^2=0.043$ ,  $df = 130$ ,  $p = 0.017$ ). Although there is a relationship between support for regulations and angler satisfaction, angler satisfaction accounted for only a small amount of the variance in support for regulations. There appears to be other factors influencing anglers support for catfish regulations other than the success of their current angling endeavors.

### Catfish Management Goals

To gauge support for a number of different catfish management goals, the 2002 NLAS survey asked catfish seeking anglers three different dichotomous questions. Each question compared two different management goals, each of which represented a different functioning regulation. This methodology was used as many survey respondents may not know the implications of a given regulation

(i.e. what effects a new minimum length limit would have) and may better understand a choice presented in terms of their angling creel.

The first question presented a decision between a functioning, small minimum length limit (i.e. no stockpiling) and no harvest restrictions (Figure 21 and 22). The former option allows for the harvest of limited, larger fish while the latter provides for harvest of larger numbers, yet smaller fish. Respondents preferred the results of a small minimum length limit three-to-one over no harvest restrictions. No difference was observed among avidity levels and only minor shifts were observed among districts.

Figure 21. Which catfish harvest option would you prefer?

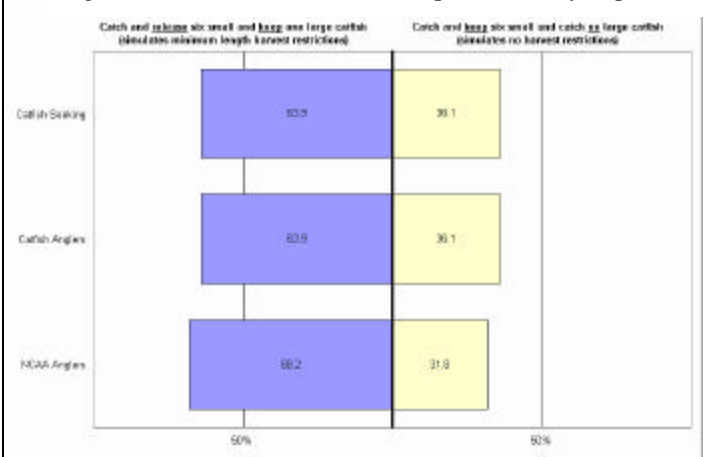
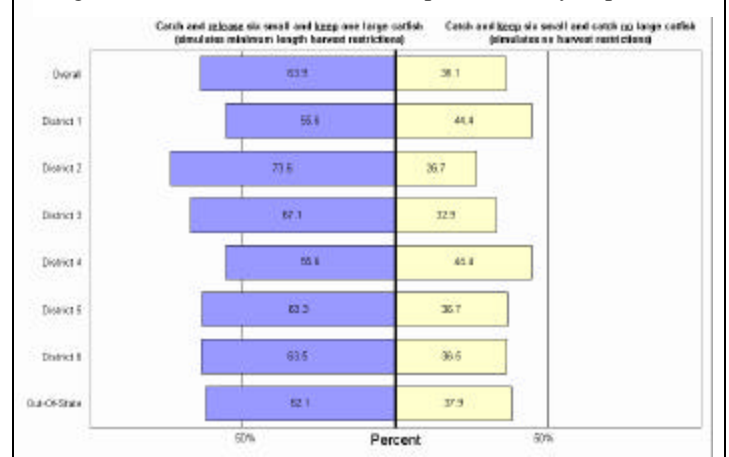


Figure 22. Which catfish harvest option would you prefer?



The second question forced a decision between two different minimum length restrictions (Figures 23 and 24). The first choice mirrors the results of using a substantial minimum length restriction to produce large fish but requires the release of small and medium size fish. The other choice represented a moderate minimum length limit protecting populations and producing medium sized fish for harvest, which is a situation typically found in smaller lakes with high-pressure and overharvest issues. Approximately 3 of 5 anglers (58.6%) would prefer the latter

option, which provides for more harvest with less emphasis on size than the larger minimum length limit. This support was similar across all districts, although out-of-state anglers showed similar support for the larger minimum length limit rather than the moderate (Figure 24). Likewise, only the most avid catfish anglers (NCAA anglers) preferred the use of a larger minimum length limit to produce large fish than a moderate minimum length limit used to offer more harvest opportunities (Figure 23).

Figure 23. Which catfish harvest option would you prefer?

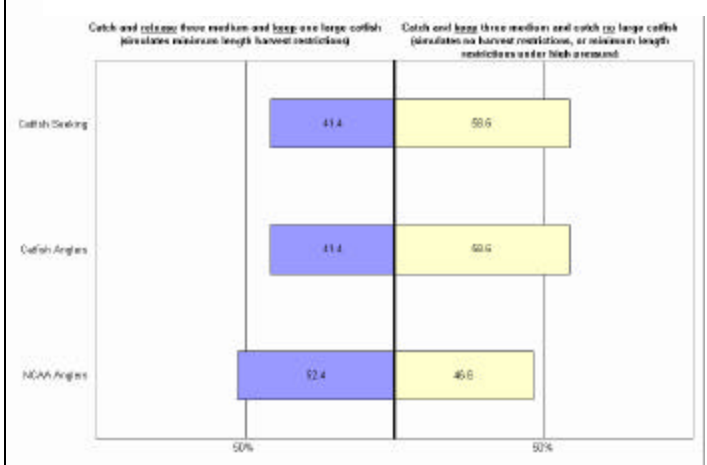
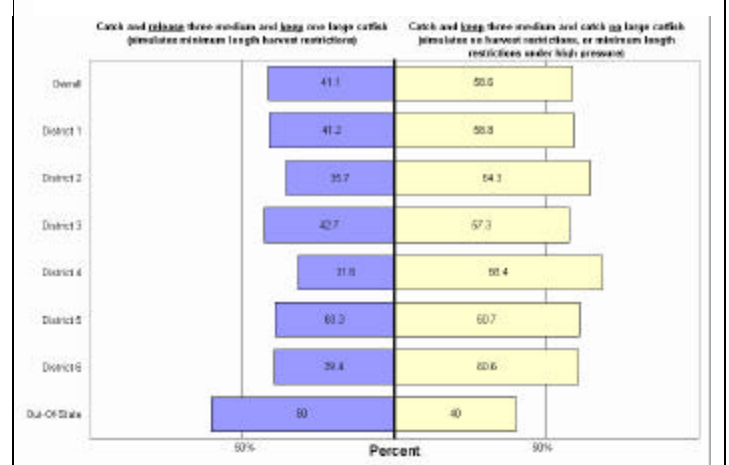
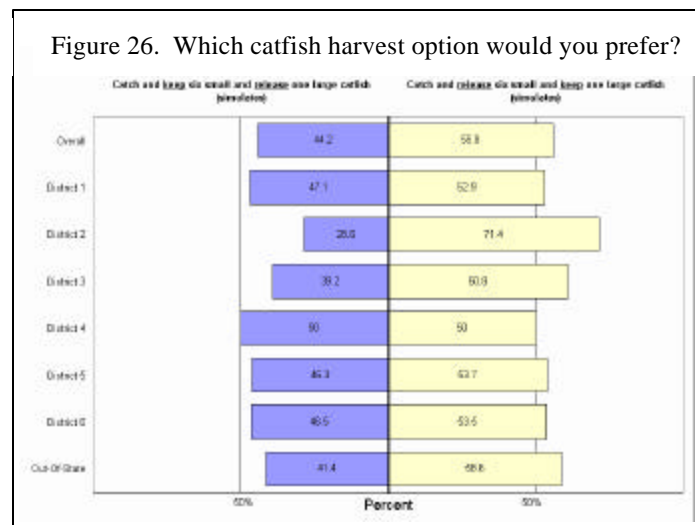
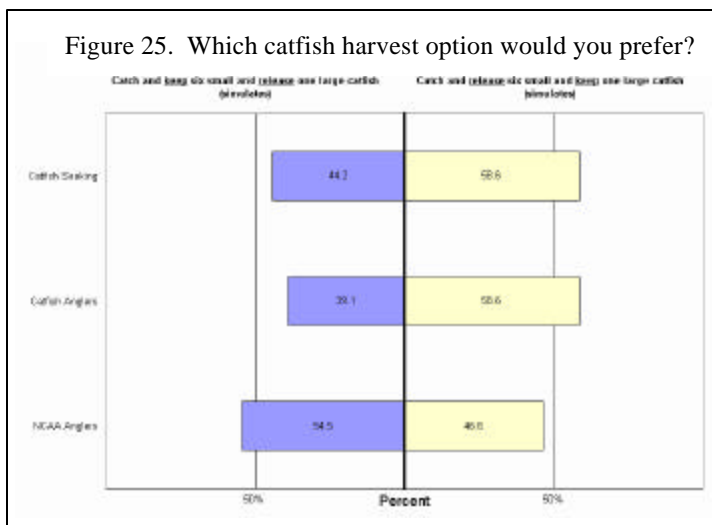


Figure 24. Which catfish harvest option would you prefer?



The final set of management goals included the use of a small minimum length limit to produce a limited harvest opportunity of larger fish while catching and releasing many smaller fish and the ability to keep many smaller fish while having the opportunity to release a large fish (Figures 25 and 26). The former option is similar to that used in the previous questions, however the latter represents the results of a maximum length limit rather than a minimum length limit. In some smaller waters of Nebraska (particularly those with no natural recruitment), it may be possible with increased stockings to provide for harvest of smaller fish while at

the same time providing a large/trophy fish potential by protecting the larger fish that survive initial harvest. A maximum length limit may be an opportunity to provide something for everyone. Nebraska anglers were fairly evenly split between these management options, with the slight majority in favor of the results of a smaller minimum length limit. This held true for all districts (Figure 26). Only the most avid anglers (NCAA anglers) favored the angling opportunities provided by a maximum length limit, once again by a small margin (Figure 25).



When asked about their angling preferences, Nebraska anglers consistently demonstrated a harvest mentality. Anglers selected options that would allow for the harvest of a few medium or one large fish over harvesting many small fish, debunking the common perception that catfish anglers prefer to eat the smaller fish and are willing to release their large catches. Presented with the options of harvesting larger fish, anglers consistently choose to harvest multiple medium-sized fish over one large, trophy fish. Nebraska anglers are supportive of the results that may be obtained by a small to moderate minimum size restriction while preferring

harvest opportunities on moderate and large fish, rather than protection of the largest size classes.

### *Baitfish Restrictions/Trophy Fish Management*

A number of newly renovated lakes and reservoirs in Nebraska are subject to a “No Live Baitfish” restriction to prevent the introduction of problematic species like carp and shad. As large, trophy-size catfish are primarily piscivorous, these lakes may not be the best opportunity for trophy or large fish management strategies if anglers are not allowed to use live baitfish. The 2002 NLAS specifically asked whether anglers would fish in a lake containing large catfish if they could not use live baitfish. The mean response among all anglers was slightly above neutral in favor of fishing under such a circumstance. In districts with high catfish angler populations (III, IV, and VI), there was a higher willingness to fish for trophy fish under baitfish restrictions than in the other districts. The most avid anglers (NCAA anglers) were also more willing to fish under baitfish restrictions than less avid anglers. This is not surprising since, as was presented earlier, the most avid anglers placed a higher value on size of fish caught than did less avid anglers. It is likely that trophy management actions undertaken on a lake with “No Live Baitfish” restrictions would not appeal large segments of anglers fishing for catfish and such strategies would likely be better utilized at other locales.

**Table 21. Live bait scale item value by district and avidity level.**

	I would fish in a lake with large channel catfish even if I was not allowed to use live-bait fish.	Sample Size		I would fish in a lake with large channel catfish even if I was not allowed to use live-bait fish.	Sample Size
Overall	3.35	651	Catfish Seeking	3.35	651
District I	3.13	30	Catfish Anglers	3.43	134
District II	2.90	20	NCAA Anglers	3.69	29
District III	3.54	108			
District IV	3.03	32			
District V	3.41	282			
District VI	3.35	122			
Non-Resident	3.14	51			

## **Appendix 3**

### **2002 Nebraska Licensed Angler Survey**

# 2002 Nebraska Angler Survey



The following questions ask about your fishing habits and experiences in Nebraska during 2002.

For each question, completely darken the circle that best matches your response. Select only **ONE** response for each question, unless instructed otherwise. Skip any items that you do not wish to answer. Your responses will remain anonymous. We will not match your responses to your name. Please return your completed survey in the enclosed envelope. Thank you for your time!



## Section A: The following questions ask about your typical experiences fishing in Nebraska during 2002. Remember to darken your response and choose only **ONE** option, unless directed otherwise.

1. What type of Nebraska fishing permit did you have during the 2002 license year?

- |  |  |
|--|--|
| <input type="radio"/> Resident annual fish | <input type="radio"/> Lifetime fish & hunt     |
| <input type="radio"/> Resident 3-day fish  | <input type="radio"/> Fee-exempt permit        |
| <input type="radio"/> Resident hunt/fish   | <input type="radio"/> Non-resident 3-day fish  |
| <input type="radio"/> Lifetime fish        | <input type="radio"/> Non-resident annual fish |
|  | <input type="radio"/> I did not have a permit  |

2. Did you fish in Nebraska during 2002?

- ☐ Yes (*skip to #4 below*)    ☐ No

3. If NO, why didn't you fish in Nebraska during 2002?

- |  |   |
|--|---|
| <input type="radio"/> Lack of time                         | <input type="radio"/> Too expensive             |
| <input type="radio"/> Dissatisfied with past fishing trips | <input type="radio"/> Physically unable to fish |
| <input type="radio"/> No one to fish with                  | <input type="radio"/> No longer enjoy fishing   |
| <input type="radio"/> Lack of access to fishing areas      | <input type="radio"/> Other                     |

**If you did not fish in Nebraska, skip to page 5, item #1**

4. What types of water bodies did you fish in Nebraska during 2002? (select all that apply)

- |  |   |
|--|---|
| <input type="radio"/> Private ponds and sandpits | <input type="radio"/> Other public lakes, reservoirs, and ponds |
| <input type="radio"/> City park ponds            | <input type="radio"/> Platte River                              |
| <input type="radio"/> Public sandpits            | <input type="radio"/> Missouri River                            |
| <input type="radio"/> Sandhill lakes             | <input type="radio"/> Other streams, rivers, and canals         |

5. Which methods of fishing did you use during 2002? (select all that apply)

- |                                     |  |
|-------------------------------------|--|
| <input type="radio"/> Bank / wading | <input type="radio"/> Motorized boat     |
| <input type="radio"/> Ice fishing   | <input type="radio"/> Non-motorized boat |
| <input type="radio"/> Float tube    | <input type="radio"/> Other              |

6. What techniques did you use during 2002? (select all that apply)

- |  |  |
|--|--|
| <input type="radio"/> Rod & reel           | <input type="radio"/> Underwater spear |
| <input type="radio"/> Fly-fishing          | <input type="radio"/> Surface spear    |
| <input type="radio"/> Set lines/limb lines | <input type="radio"/> Snagging         |
| <input type="radio"/> Archery              | <input type="radio"/> Other            |

7. About how far is the one-way distance from your residence to your favorite Nebraska water body?

- |  |  |
|--|--|
| <input type="radio"/> 10 or less miles | <input type="radio"/> 61 to 100 miles  |
| <input type="radio"/> 11 to 20 miles   | <input type="radio"/> 101 to 250 miles |
| <input type="radio"/> 21 to 40 miles   | <input type="radio"/> 251 to 500 miles |
| <input type="radio"/> 41 to 60 miles   | <input type="radio"/> Over 500 miles   |

8. About how far is the one-way distance from your residence to your most visited Nebraska water body?

- |  |  |
|--|--|
| <input type="radio"/> 10 or less miles | <input type="radio"/> 61 to 100 miles  |
| <input type="radio"/> 11 to 20 miles   | <input type="radio"/> 101 to 250 miles |
| <input type="radio"/> 21 to 40 miles   | <input type="radio"/> 251 to 500 miles |
| <input type="radio"/> 41 to 60 miles   | <input type="radio"/> Over 500 miles   |

9. How satisfied were you with your fishing experiences in Nebraska during 2002?

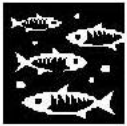
- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Neutral
- ☐ Somewhat dissatisfied
- ☐ Very dissatisfied

10. Did you fish at a water body that required a Nebraska Park Entry Permit during 2002?

- ☐ Yes                      ☐ No







**Section B:** This section asks you to identify your favorite fish to catch in Nebraska, and then asks about the fish you attempted to catch in Nebraska during 2002.

1. Which type of fish do you prefer to fish for in Nebraska? (Select only ONE)

- |                                       |   |   |                                  |
|---------------------------------------|---|---|----------------------------------|
| <input type="radio"/> Striped bass    | <input type="radio"/> Bluegill / Sunfish        | <input type="radio"/> Drum  | <input type="radio"/> Sturgeon   |
| <input type="radio"/> Wiper           | <input type="radio"/> Crappie                   | <input type="radio"/> Channel catfish                             | <input type="radio"/> Carp       |
| <input type="radio"/> White bass      | <input type="radio"/> Yellow perch              | <input type="radio"/> Blue catfish                                | <input type="radio"/> Trout      |
| <input type="radio"/> Largemouth bass | <input type="radio"/> Walleye / Sauger          | <input type="radio"/> Flathead catfish                            | <input type="radio"/> Paddlefish |
| <input type="radio"/> Smallmouth bass | <input type="radio"/> Northern pike             | <input type="radio"/> Bullhead                                    | <input type="radio"/> Other      |
|                                       | <input type="radio"/> Muskellunge / Tiger musky | <input type="radio"/> I do not prefer any particular type of fish |                                  |

2) Which types of fish did you try to catch in Nebraska waters during 2002? (Only select fish you specifically tried to catch. If you typically fished for whatever was biting, select the option "I fished for anything".)



3) Thinking about the types of fish you tried to catch this year, how many LEGAL-sized fish did you keep? (Answer for only the fish you selected in the previous question. If you did not catch a legal-sized fish, leave the circles blank.)

SELECT THE TYPES OF FISH YOU ATTEMPTED TO CATCH DURING 2002 (select all that apply)		Kept All 1	Kept Many 2	Kept Half 3	Kept A Few 4	Kept None 5
Striped bass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wiper	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White bass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Largemouth bass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smallmouth bass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bluegill / Sunfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crappie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yellow perch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walleye / Sauger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Northern pike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muskellunge / Tiger musky	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Channel catfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blue catfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flathead catfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullhead	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sturgeon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trout	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paddlefish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I fished for anything	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Go on to next page





## Section C: This section asks about how often you fish and the reasons why you fish.

1. For each month, indicate about how many DAYS you fished in Nebraska during 2002.  
Only darken ONE circle for each month.

	Estimate the number of DAYS each month you fished in Nebraska during 2002											
	NONE	1	2	3	4	5	6-8	9-11	12-14	15-17	18-20	OVER 20
Jan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feb.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
March	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
April	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
May	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
June	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
July	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aug.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sept.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oct.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Indicate the importance for each item  
as a reason why you fish...

	NOT AT ALL IMPORTANT	SLIGHTLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	EXTREMELY IMPORTANT
To be outdoors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For the experience of the catch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To experience natural surroundings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be with friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For the challenge or sport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For relaxation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To experience new and different things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To get away from other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To compete for prizes or money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To experience adventure and excitement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To obtain fish for eating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be close to the water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For physical exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To catch a trophy fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To get away from the daily routine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For family recreation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For the fun of catching fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Turn over the page







**Section D:** The following questions ask you about your catfish experiences in Nebraska. If you have **NOT** fished for catfish in 2002, then skip this section and go on to the next page, Section E.

REMEMBER TO SELECT ONLY ONE RESPONSE FOR EACH QUESTION.

1. How many days during 2002 did you attempt to catch catfish?

- ☐ No attempts [skip to next page, Section E, Item #1]    ☐ 20-29 days  
☐ Once    ☐ 30-49 days  
☐ 2-4 days    ☐ 50-69 days  
☐ 5-9 days    ☐ 70-120 days  
☐ 10-19 days    ☐ Over 120 days

2. What type of catfish do you prefer to catch?

- ☐ Blue    ☐ Bullhead  
☐ Channel    ☐ No preference  
☐ Flathead

3. What is the farthest one-way distance in Nebraska that you have traveled to fish for catfish during 2002?

- ☐ 10 or less miles    ☐ 61 to 100 miles  
☐ 11 to 20 miles    ☐ 101 to 250 miles  
☐ 21 to 40 miles    ☐ 251 to 500 miles  
☐ 41 to 60 miles    ☐ Over 500 miles

4. What time of day do you usually fish for catfish?

- ☐ 3 am to 8 am    ☐ 6 pm to 10 pm  
☐ 8 am to noon    ☐ 10 pm to 3 am  
☐ Noon to 6 pm    ☐ A variety of times

5. Which catfish harvest option would you prefer?

- ☐ Catch and release six small and keep one large catfish OR  
☐ Catch and keep six small and catch no large catfish

6. Which catfish harvest option would you prefer?

- ☐ Catch and release three medium and keep one large catfish OR  
☐ Catch and keep three medium and catch no large catfish

7. Which catfish harvest option would you prefer?

- ☐ Catch and keep six small and release one large catfish OR  
☐ Catch and release six small and keep one large catfish

8. Indicate how much you agree with each of the following statements about fishing for catfish.

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
I am happy with my success fishing for catfish in Nebraska	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I support regulations on catfish to increase their numbers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend fishing for catfish in Nebraska to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am against catfish bag limits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is becoming more difficult to catch a catfish in Nebraska	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am against catfish length limits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about pollution where I fish for catfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the size of catfish I catch in Nebraska	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I support regulations on catfish to increase their size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would fish in a lake with large <u>channel</u> catfish even if I was not allowed to use live-bait fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about your experiences fishing in Nebraska in 2002....	12 inches or less	13- 16 inches	17- 20 inches	21-24 inches	25-28 inches	29- 32 inches	Over 32 inches	Did NOT catch a catfish	Did NOT release a catfish
9. What is the largest <u>flathead</u> catfish you <u>caught</u> this year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
10. What is the largest <u>channel</u> catfish you <u>caught</u> this year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
11. What is the largest <u>flathead</u> catfish you <u>caught and released</u> this year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. What is the largest <u>channel</u> catfish you <u>caught and released</u> this year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Go on to next page





**Section E:** These questions ask for your thoughts about fishing in general and to tell us a little bit about yourself. Remember, your responses will remain anonymous.

1. Indicate how much you agree with each of the following statements about fishing.	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
A fishing trip can be successful even if no fish are caught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The bigger the fish I catch, the better the fishing trip	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm happiest with a fishing trip if I catch at least the limit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to keep all the fish I catch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The more fish I catch, the happier I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm just as happy if I release all the fish I catch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I thought I wouldn't catch any fish, I would not go fishing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am the happiest with a fishing trip if I catch a challenging game fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I usually eat the fish I catch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rather catch one or two big fish than ten smaller fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I go fishing, I'm just as happy if I don't catch a fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm just as happy if I don't keep the fish I catch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to fish where I know I have a chance to catch a trophy fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A successful fishing trip is one in which many fish are caught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A full stringer is the best indicator of a good fishing trip.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I go fishing, I am not satisfied unless I catch at least something	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2. What is your gender?**

- ☐ Female ☐ Male

**3. What is your age?**

- ☐ 16-24 ☐ 45-54  
☐ 25-34 ☐ 55-64  
☐ 35-44 ☐ 65 and older

**4. What is your ethnicity?**

- ☐ Caucasian ☐ American Indian  
☐ Hispanic ☐ Pacific Islander  
☐ African American ☐ Other  
☐ Asian ☐ Multi-ethnic  
☐ Middle Eastern

**5. What is the highest education you have achieved?**

- ☐ Some schooling ☐ Bachelors degree  
☐ High school or GED ☐ Masters degree  
☐ Associate/trade degree ☐ Doctorate, law, or medical degree  
☐ Some college ☐ Other

**6. What is your household income?**

- ☐ Less than 10,000 ☐ 50,000 to 59,999  
☐ 10,000 to 19,999 ☐ 60,000 to 79,999  
☐ 20,000 to 39,999 ☐ 80,000 to 100,000  
☐ 40,000 to 49,999 ☐ Over 100,000

**7. Were you checked by a Nebraska conservation officer wearing a sidearm while fishing during 2002?**

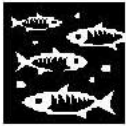
- ☐ Yes ☐ No

**8. What is your zipcode?**

Write the number in the boxes and darken the circles.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(0)	(0)	(0)	(0)	(0)
(1)	(1)	(1)	(1)	(1)
(2)	(2)	(2)	(2)	(2)
(3)	(3)	(3)	(3)	(3)
(4)	(4)	(4)	(4)	(4)
(5)	(5)	(5)	(5)	(5)
(6)	(6)	(6)	(6)	(6)
(7)	(7)	(7)	(7)	(7)
(8)	(8)	(8)	(8)	(8)
(9)	(9)	(9)	(9)	(9)

**Please turn over the page for the last three questions of the survey**



**Section F:** This last section asks you how you learn about fishing in Nebraska and for your thoughts and opinions about fishing in the state.

**1. How do you get information on fishing in Nebraska? (select all that apply)**

- |   |   |   |
|---|---|---|
| <input type="radio"/> Outdoor Nebraska newspaper            | <input type="radio"/> Bait and tackle shops             | <input type="radio"/> Nebraska State Fair                             |
| <input type="radio"/> Other newspapers                      | <input type="radio"/> Fishing organizations             | <input type="radio"/> Fishing regulations guide                       |
| <input type="radio"/> NEBRASKALAND magazine                 | <input type="radio"/> Sports shows                      | <input type="radio"/> State parks / facilities                        |
| <input type="radio"/> Other fishing / outdoor magazines     | <input type="radio"/> Outdoor Nebraska TV program       | <input type="radio"/> Friends and family                              |
| <input type="radio"/> Nebraska Game and Parks Internet site | <input type="radio"/> Outdoor Nebraska radio program    | <input type="radio"/> Other   |
| <input type="radio"/> Other Internet fishing sites          | <input type="radio"/> Other news programs (TV or radio) | <input type="radio"/> I do not get information on fishing in Nebraska |



**2. What do you like best about fishing in Nebraska? Please write your response in the box below.**

**3. What suggestions do you have to improve fishing in Nebraska? Please write your response in the box below.**

**Thank you for completing the 2002 Nebraska Angler Survey.  
Please return your survey in the enclosed envelope.**